SIEMENS

Datasheet

3VA1180-6EF42-0AA0



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS H ICU=70KA @ 415 V 4-POLE, LINE PROTECTION TM240, ATAM, IN=80A OVERLOAD PROTECTION IR=56A ...80A SHORT CIRCUIT PROTECTION II=5...10 X IN NEUTRAL UNPROTECTED BUSBAR CONNECTION

Figure similar

| Model | | | |
|---|-----------------------------|--|--|
| product brand name | SENTRON | | |
| Product designation | Molded case circuit breaker | | |
| Design of the product | Line protection | | |
| Product variations | General Applications | | |
| Ground fault monitoring version | Without | | |
| Design of the auxiliary release | Without auxiliary release | | |
| Design of the auxiliary switch | Without | | |
| Design of the operating mechanism | toggle handle | | |
| Type of the driving mechanism / motor drive | No | | |
| Design of the overcurrent release | TM240 | | |

| General technical data | | | | |
|---|--|--------|--|--|
| Number of poles | | 4 | | |
| Trip class / of the L-trip / with I2t characteristic / initial value | | 1 | | |
| Trip class / of the L-trip / with I2t characteristic / Full-scale value | | 1 | | |
| Electrical endurance (switching cycles) | | | | |
| • at AC-1 / at 380/415 V / at 50/60 Hz | | 8 000 | | |
| circuit-breaker / Design | | 3VA | | |
| Mechanical service life (switching cycles) / typical | | 15 000 | | |

| Voltage | | |
|--------------------|---|-----|
| Insulation voltage | | |
| Rated value | V | 800 |

| Protection class | | |
|---|---|-------------------|
| Protective function of the overcurrent release | | LI |
| Switching capacity | | |
| Switching capacity class of the circuit breaker | | Н |
| - , , | | |
| Dissipation | | |
| Active power loss | | 10.0 |
| • maximum | W | 19.2 |
| Electricity | | |
| Operating current / at 45 °C / Rated value | Α | 80 |
| Continuous current / Rated value / maximum | Α | 160 |
| Continuous current | | |
| Rated value | Α | 80 |
| Adjustable response value current | | |
| of the current-dependent overload release / | Α | 1 |
| Full-scale value | | |
| • of the instantaneous short-circuit release / initial | Α | 5 |
| value | | |
| Net weight | g | 1 200 |
| Main circuit | | |
| Operating voltage | | |
| with AC / at 50/60 Hz / Rated value | V | 690 |
| • for DC / Rated value | V | 600 |
| Operating current | | |
| • at 40 °C / Rated value | Α | 80 |
| • at 50 °C / Rated value | Α | 80 |
| • at 55 °C / Rated value | Α | 78 |
| ● at 60 °C / Rated value | Α | 77 |
| • at 65 °C / Rated value | Α | 75 |
| ● at 70 °C / Rated value | Α | 74 |
| Auxiliary circuit | | |
| Number of CO contacts | | |
| • for auxiliary contacts | | 0 |
| | | |
| Suitability for use | | system protection |
| Suitability for use | | System protection |
| Adjustable parameters | | |
| Adjustable response value current | | |
| of I-trip / Full-scale value | Α | 10 |
| • for N-conductor protection / initial value | Α | 0 |
| for N-conductor protection / Full-scale value | Α | 0 |

| Adjustable response value current / of the current- dependent overload release / initial value | Α | 0.7 |
|---|----|--------------------|
| Appearance | | |
| Product details | | |
| Product component | | |
| Trip indicator | | No |
| ● display | | No |
| Voltage trigger | | No |
| undervoltage release | | No |
| undervoltage release with leading contact | | No |
| Product property | | |
| for neutral conductors / upgradeable/retrofittable / Short-circuit and overload proof | | No |
| Product expansion | | |
| optional | | |
| — motor drive | | Yes |
| Product function | | |
| Product function | | |
| Intrinsic device protection | | Yes |
| communication function | | No |
| Phase failure detection | | No |
| other measurement function | | No |
| Accessories | | |
| Manufacturer article number / of the supplied basic switch | | 3VA1180-6EF42-0AA0 |
| Short circuit | | |
| Operational short-circuit current breaking capacity | | |
| (lcs) | | |
| • at 240 V / Rated value | kA | 100 |
| • at 415 V / Rated value | kA | 70 |
| • at 440 V / Rated value | kA | 36 |
| • at 500 V / Rated value | kA | 15 |
| • at 690 V / Rated value | kA | 5 |
| Maximum short-circuit current breaking capacity (Icu) | | |
| • at 240 V / Rated value | kA | 100 |
| • at 415 V / Rated value | kA | 70 |
| • at 440 V / Rated value | kA | 36 |
| • at 500 V / Rated value | kA | 20 |
| • at 690 V / Rated value | kA | 10 |
| Short-circuit current making capacity (Icm) | | |

| • at 240 V / Rated value | kA | 220 |
|--------------------------|----|-----|
| • at 415 V / Rated value | kA | 154 |
| • at 690 V / Rated value | kA | 17 |

| Connections | | | |
|--|----------------|--|--|
| Arrangement of electrical connectors | | | |
| • for main current circuit | Front terminal | | |
| Type of connectable conductor cross-section | | | |
| • for flat-bar terminal connection / minimum | 12 x 0 | | |
| • for flat-bar terminal connection / maximum | 17 x 6.5 | | |
| Design of the electrical connection | | | |
| • for main current circuit | Lug terminal | | |

| Mechanical Design | | | |
|-------------------|----|----------------|--|
| Height | mm | 130 | |
| Width | mm | 101.6 | |
| Depth | mm | 70 | |
| Mounting type | | fixed mounting | |

| Environmental conditions | | | |
|--|----|-----|--|
| Ambient temperature | | | |
| during operation / minimum | °C | -25 | |
| during operation / maximum | °C | 70 | |
| during storage / minimum | °C | -40 | |
| during storage / maximum | °C | 80 | |

Certificates Reference code • acc. to DIN EN 61346-2 Q

Q • acc. to DIN EN 81346-2

| General Product | t Approval | EMC | Declaration of Conformity | Shipping Approval | other | |
|-----------------|------------|-------|------------------------------|----------------------|-------|--|
| | | other | | | other | |







Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)
https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA11806EF420AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3VA11806EF420AA0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11806EF420AA0

Tender specifications http://ausschreibungstexte.siemens.com/tiplv

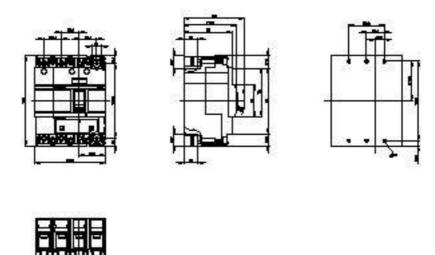


Figure similar

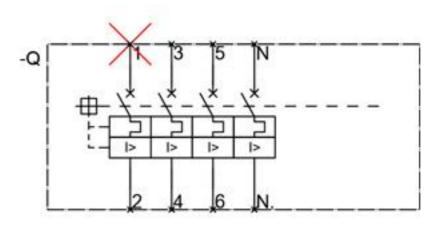


Figure similar

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